Commonwealth of Kentucky

Natural Resources and Environmental Protection Cabinet Department for Environmental Protection Division for Air Quality

803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

AIR QUALITY PERMIT

Permittee Name: Westvaco Kentucky, L.P. Mailing Address: 1724 Westvaco Road

P.O. Box 278

Wickliffe, KY 42087-0278

Source Name: Westvaco Kentucky, L.P.

Mailing Address: same as above

Source Location: KY Highway 51 South

County: Ballard

Permit Type: Federally-Enforceable

Review Type: Synthetic Minor

Permit Number: VF-01-006 Log Number: 54153

Application

Complete Date: October 25, 2001

KYEIS ID ID #: 21-007-00002

SIC Code: 2621

Regional Office: Paducah Regional Office

4500 Clarks River Road Paducah, KY 42003-0823

(270) 898-8468

Issuance Date: January 24, 2002 Expiration Date: January 24, 2007

> John Lyons, Director Division for Air Quality

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Unit 03 Recovery Furnace

Description:

The chemical recovery furnace is designed to recover and regenerate spent cooking chemicals from the wood pulping operations. The furnace also serves as the primary steam generating unit at the mill. The unit is controlled by a wet bottom ESP followed by a wet scrubber.

Rated Short-term Capacity: 473,000 lb steam/hr

Installation Date: July 1970

Permitted Modifications:

This permit authorizes the replacement of the economizer and superheater. The replacement units will be functionally similar to the existing units with no resultant increase in steaming capacity or liquor firing rates.

APPLICABLE REGULATIONS:

Regulation 401 KAR 61:025. Existing kraft (sulfate) pulp mills, provides standards for the control of emissions from existing kraft (sulfate) pulp mills.

Kentucky Air Quality Operating Permits:

O-84-088

F-99-009

National Emissions Standards for Hazardous Air Pollutants 40 CFR Part 63 Subpart MM [Future Effective Requirement- January 2004]

1. **Operating Limitations**: Not Applicable.

2. Emissions Limitations:

- a. Emissions of total reduced sulfur (TRS) shall not exceed an exit stack gas concentration of forty (40) parts per million by volume, corrected to eight (8) percent by volume oxygen, for more than sixty (60) total minutes in any twenty-four (24) hour period. [401 KAR 61:025 Section 4(2)]
 - Compliance Demonstration Method: Permittee will continuously monitor TRS emissions. Compliance will be demonstrated by the generation of a daily report documenting any periods where TRS concentration exceeded 40 ppmv @ 8% O₂.
- b. Emissions of particulate matter (PM) shall not exceed 3.5 lbs/ton of equivalent unbleached air dried pulp produced. [401 KAR 61:025 Section 3(1)]
 - **Compliance Demonstration Method:** Permittee will demonstrate compliance through emission testing and by the proper operation and maintenance of the ESP and scrubber in accordance with manufacturer's recommended operating practices.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. Emissions of total reduced sulfur (TRS) shall not exceed an exit stack gas concentration of fifteen (15) parts per million by volume, corrected to eight (8) percent by volume oxygen, expressed as an arithmetic average over any consecutive twenty-four (24) hour period. [401 KAR 61:025 Section 4(1)]

Compliance Demonstration Method: Permittee will continuously monitor TRS emissions. Compliance will be demonstrated by a daily report containing an hourly calculation of the arithmetic average concentration, in ppmv @ 8% O₂ (by volume), over the previous twenty-four (24) hour period.

d. Visible emissions shall not exceed an opacity of forty (40) percent. [401 KAR 61:025 Section 3(4)]

Compliance Demonstration Method: Opacity monitoring or visible emissions observations from this unit are hindered due to the moisture interference from the wet scrubber. Permittee will demonstrate compliance by the proper operation and maintenance of the ESP and scrubber in accordance with manufacturer's recommended operating practices.

3. <u>Testing Requirements:</u>

Pursuant to 401 KAR 50:045, *Performance tests*, emissions testing shall be conducted as required by the division.

4. Specific Monitoring Requirements:

- a. Permittee shall calibrate, maintain, and operate according to manufacturer's specifications a device to continuously measure the total reduced sulfur (TRS) compounds emitted from the recovery furnace exhaust.
- b. Permittee shall measure pressure drop, scrubbant flow rate, and pH of the scrubber once per shift.
- c. Permittee shall monitor precipitator currents, voltages, and check heater operation once per shift.
- d. Permittee shall conduct an inspection of the precipitator vibrators, rappers, and air horns once per day to assure proper operation.

5. Specific Recordkeeping Requirements:

a. Permittee shall maintain the daily reports documenting any periods where TRS concentration exceeded 40 ppmv @ 8% O₂ and the calculations of arithmetic average concentration, in ppmv @ 8% O₂ (by volume), over each consecutive twenty-four (24) hour period.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Permittee shall maintain continuous records of TRS emissions from the recovery furnace.

- c. Permittee shall record monitor availability each calendar quarter. For the purpose of calculating monitor downtime, periods of downtime due to scheduled normal monitor maintenance, calibrations, relative accuracy tests, and quality assurance audits do not have to be considered in the total. A log is to be kept of all periods of monitor downtime listing the time the monitor went off-line, the reason for the downtime, the time the monitor was brought back on-line, and any repairs, adjustments, and calibrations performed on the monitor.
- d. Permittee shall maintain records, recorded once per shift, documenting the scrubber pressure drop, flow rate, and pH.
- e. Permittee shall maintain records, recorded once per shift, documenting the precipitator currents, voltages, and heater parameters.
- f. Permittee shall maintain records, recorded once per day, documenting proper operation of the precipitator vibrators, rappers, and air horns.
- g. Permittee shall record each incident when PM emissions were not properly controlled by the scrubber and ESP. This record shall include the date, time, duration, cause, and any corrective action taken.

All records shall be kept for a period of five years.

6. Specific Reporting Requirements:

- a. If monitor downtime in a calendar quarter exceeds 44 hours or 2% of the recovery furnace operating time, whichever is less, then a written report containing all the information required in Condition 5c shall be submitted to the Paducah Regional Office of the Division for Air Quality by the 28th day of the first month of the next calendar quarter.
- b. Any monitor downtimes of more than eight hours in any calendar day shall be promptly reported to the Paducah Regional Office of the Division for Air Quality by phone, facsimile transmission, or electronic mail within one business day.
- c. A summary of the precipitator and scrubber inspection logs shall be included in the semi-annual report submitted to the Division for Air Quality.

Please refer to additional requirements in Section F.

7. Specific Control Equipment Operating Conditions: Permittee shall operate the ESP and wet scrubber in accordance with manufacturer's recommended operating practices. Please refer to Section E.

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SECTION C – INSIGNIFICANT ACTIVITIES

Not Applicable.

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

See Unit 00 – Entire Mill in Section H (Alternate Operating Scenarios).

SECTION E – SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

2. All air pollution control devices shall be maintained regularly in accordance with good engineering practices and recommendations of the respective manufacturer. The permittee shall monitor and maintain records of all maintenance activities performed at all control devices, including preventive maintenance and routine inspections.

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SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a. Date, place as defined in this permit, and time of sampling or measurements.
- b. Analyses performance dates;
- c. Company or entity that performed analyses;
- d. Analytical techniques or methods used;
- e. Analyses results; and
- f. Operating conditions during time of sampling or measurement.

[Material incorporated by reference by 401 KAR 52:020, Section 1b (IV)1]

- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Material incorporated by reference by 401 KAR 52:020, Sections 1b(IV) 2 and 1a(8)]
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
 - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.
 - e. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

[Material incorporated by reference by 401 KAR 52:020, Section 1b (V)1.]

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SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 6. The semi-annual reports are due prior to January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6. [Material incorporated by reference by 401 KAR 52:020, Section 1b V 3, 4.]
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition:
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, and
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the time frames specified in the permit.

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SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Paducah Regional Office 4500 Clarks River Road Paducah, KY 42003-0823 U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth St.

Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G – GENERAL CONDITIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including termination, revocation and reissuance, revision or denial of a permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 3]

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 6]
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the division may provide a shorter time period in the case of an emergency.

- 3. The permittee shall furnish information upon requested by the cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 7,8]
- 4. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority. [Material incorporated by reference by 401 KAR 52:020, Section 7(1)]

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SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 14]

- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 4]
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 15)b]
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [Material incorporated by reference by 401 KAR 52:020, Section 1a, 10]
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:020, Section 11(3)(b)]
- 11. This permit does not convey property rights or exclusive privileges. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 9]
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 52:020, Section 11(3)(d)].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 52:020, Section 11(3)(a)]
- 15. Permit Shield A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - (a) Applicable requirements that are included and specifically identified in the permit and
 - (b) Non-applicable requirements expressly identified in this permit.
- 16. The permittee shall continue to comply with all previously issued construction and operating permits.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

(b) <u>Permit Expiration and Reapplication Requirements</u>

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the division. [401 KAR 52:020, Section 12]

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the division after the completeness determination has been made on any application, by whatever deadline the division sets. [401 KAR 52:030 Section 8(2)]

(c) <u>Permit Revisions</u>

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) <u>Construction, Start-Up, and Initial Compliance Demonstration Requirements</u>

- 1. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- 2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the cabinet may extend these time periods if the source shows good cause.

- 4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the cabinet.
- 5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Any performance tests must be conducted in accordance with General Provisions G(d)6 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.
- 6. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of a required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the division shall be notified of the actual test date at least ten (10) days prior to the test.

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:

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SECTION G - GENERAL PROVISIONS (CONTINUED)

- a. An emergency occurred and the permittee can identify the cause of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
- d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within ten (10) working days of the time when emission limitations were exceeded due to the emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- e. This requirement does not relieve the source from other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement. [401 KAR 52:020, Section 24(3)]
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:020, Section 24(2)]
- (g) Risk Management Provisions
- 1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP REPORTING CENTER P.O. Box 3346 Merrifield, VA, 22116-3346

- 2. If requested, submit additional relevant information to the division or the U.S. EPA.
- (h) Ozone depleting substances
- The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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SECTION H – ALTERNATE OPERATING SCENARIOS

The alternate operating scenario set forth below has been approved by the division based on information supplied with the application and during the application review process. The terms and conditions of each alternate operating scenario have been developed to ensure compliance with the applicable regulations. The permittee, when making a change from one operating scenario to another, shall record contemporaneously in a log at the permitted facility a record of the scenario under which the facility is operating. The permit shield, as provided in Section G, Condition (a)15, shall extend to each alternate operating scenario set forth in this Section. All conditions not specified under an alternate operating scenario shall remain unchanged from their permit values or requirements.

Temporary Economizer Bypass

This alternate operating scenario authorizes a temporary bypass of the economizer unit on the recovery furnace until delivery and installation of a replacement unit.

Unit 00 Entire Mill

Description:

This emissions unit ID represents the entire pulp and paper mill.

Rated Short-term Capacity: 1006 Air-dried tons of unbleached pulp per day

Installation Date: July 1970

Applicable Regulations:

Kentucky Air Quality Operating Permits: F-99-009

Regulations as described for specific emissions units affected by this permit and contained herein.

1. Operating Limitations:

Pulp production shall not exceed 358,372 air-dried tons for any rolling 12 month period containing time when the recovery furnace was operated under this scenario. [Synthetic minor permit limitation]

Compliance Demonstration Method: Monthly pulp production records shall be maintained and totaled for each rolling 12-month period.

- **2. Emissions Limitations:** Not Applicable to the Entire Mill.
- **3. Testing Requirements:** Not Applicable to the Entire Mill.
- **4. Specific Monitoring Requirements:** Pulp production shall be monitored monthly.
- **5. Specific Recordkeeping Requirements:** Records of pulp production shall be maintained in accordance with the general requirements of Section F.
- **6.** Specific Reporting Requirements: See Section F.

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SECTION H – ALTERNATE OPERATING SCENARIOS (CONTINUED)

Unit 03 Recovery Furnace

Description:

The chemical recovery furnace is designed to recover and regenerate spent cooking chemicals from the wood pulping operations. The furnace also serves as the primary steam generating unit at the mill. The unit is controlled by a wet bottom ESP followed by a wet scrubber.

Rated Short-term Capacity: 473,000 lb steam/hr

Installation Date: July 1970

Permitted Modifications:

This alternate operating scenario authorizes a temporary bypass of the economizer until delivery and installation of the replacement unit.

Applicable Regulations:

Regulation 401 KAR 61:025. *Existing kraft (sulfate) pulp mills*, provides standards for the control of emissions from existing kraft (sulfate) pulp mills.

Kentucky Air Quality Operating Permits: O-84-088 F-99-009

National Emissions Standards for Hazardous Air Pollutants 40 CFR Part 63 Subpart MM [Future Effective Requirement- January 2004]

1. Operating Limitations:

a. The recovery furnace shall operate for no more than 229 days during any one-year period while the economizer is bypassed. [Synthetic minor permit limit]

Compliance Demonstration Method: Permittee will demonstrate compliance by maintaining a record of the days the recovery furnace operates under this scenario.

b. The firing rate of black liquor solids shall not exceed 141,250 pounds per hour, averaged over a three-hour period. [Limitation to avoid the applicability of 40 CFR 60 Subpart BB]

Compliance Demonstration Method: Permittee will demonstrate compliance by performing a calculation of the hourly black liquor firing rate averaged over the previous three hour period.

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SECTION H – ALTERNATE OPERATING SCENARIOS (CONTINUED)

2. Emissions Limitations:

a. Emissions of total reduced sulfur (TRS) shall not exceed an exit stack gas concentration of forty (40) parts per million by volume, corrected to eight (8) percent by volume oxygen, for more than sixty (60) total minutes in any twenty-four (24) hour period. [401 KAR 61:025 Section 4(2)]

Compliance Demonstration Method: Permittee will continuously monitor TRS emissions. Compliance will be demonstrated by the generation of a daily report documenting any periods where TRS concentration exceeded 40 ppmv @ 8% O₂.

b. Emissions of particulate matter (PM) shall not exceed 3.5 lbs/ton of equivalent unbleached air dried pulp produced. [401 KAR 61:025 Section 3(1)]

Compliance Demonstration Method: Permittee will demonstrate compliance through emission testing and by the proper operation and maintenance of the ESP and scrubber in accordance with manufacturer's recommended operating practices.

c. Emissions of total reduced sulfur (TRS) shall not exceed an exit stack gas concentration of fifteen (15) parts per million by volume, corrected to eight (8) percent by volume oxygen, expressed as an arithmetic average over any consecutive twenty-four (24) hour period. [401 KAR 61:025 Section 4(1)]

Compliance Demonstration Method: Permittee will continuously monitor TRS emissions. Compliance will be demonstrated by a daily report containing an hourly calculation of the arithmetic average concentration, in ppmv @ 8% O₂ (by volume), over the previous twenty-four (24) hour period.

d. Visible emissions shall not exceed an opacity of forty (40) percent. [401 KAR 61:025 Section 3(4)]

Compliance Demonstration Method: Opacity monitoring or visible emissions observations from this unit are hindered due to the moisture interference from the wet scrubber. Permittee will demonstrate compliance by the proper operation and maintenance of the ESP and scrubber in accordance with manufacturer's recommended operating practices.

3. Testing Requirements:

Pursuant to 401 KAR 50:045, Performance tests, emissions testing shall be conducted as required by the division.

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SECTION H – ALTERNATE OPERATING SCENARIOS (CONTINUED)

4. Specific Monitoring Requirements:

a. Permittee shall calibrate, maintain, and operate according to manufacturer's specifications a device to continuously measure the total reduced sulfur (TRS) compounds emitted from the recovery furnace exhaust.

- b. Permittee shall measure pressure drop, scrubbant flow rate, and pH across the scrubber once per shift.
- c. Permittee shall monitor precipitator currents, voltages, and check heater operation once per shift.
- d. Permittee shall conduct a inspection of the precipitator vibrators, rappers, and air horns once per day to assure proper operation.
- e. Permittee shall monitor the black liquor firing rate hourly.

5. Specific Recordkeeping Requirements:

- a. Permittee shall maintain the daily reports documenting any periods where TRS concentration exceeded 40 ppmv @ 8% O₂ and the calculations of arithmetic average concentration, in ppmv @ 8% O₂ (by volume), over each consecutive twenty-four (24) hour period.
- b. Permittee shall maintain continuous records of TRS emissions from the recovery furnace.
- c. Permittee shall record monitor availability each calendar quarter. For the purpose of calculating monitor downtime, periods of downtime due to scheduled normal monitor maintenance, calibrations, relative accuracy tests, and quality assurance audits do not have to be considered in the total. A log is to be kept of all periods of monitor downtime listing the time the monitor went off-line, the reason for the downtime, the time the monitor was brought back on-line, and any repairs, adjustments, and calibrations performed on the monitor.
- d. Permittee shall maintain records, recorded once per shift, documenting the scrubber pressure drop, flow rate, and pH.
- e. Permittee shall maintain records, recorded once per shift, documenting the precipitator currents, voltages, and heater parameters.
- f. Permittee shall maintain records, recorded once per day, documenting proper operation of the precipitator vibrators, rappers, and air horns.
- g. Permittee shall record each incident when PM emissions were not properly controlled by the scrubber and ESP. This record shall include the date, time, duration, cause, and any corrective action taken.

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SECTION H – ALTERNATE OPERATING SCENARIOS (CONTINUED)

h. Permittee shall keep a record of the days that the recovery furnace operates under this scenario.

i. Permittee shall maintain records of the black liquor firing rate.

All records shall be kept for a period of five years.

6. Specific Reporting Requirements:

- a. If monitor downtime in a calendar quarter exceeds 44 hours or 2% of the recovery furnace operating time, whichever is less, then a written report containing all the information required in Condition 5c shall be submitted to the Paducah Regional Office of the Division for Air Quality by the 28th day of the first month of the next calendar quarter.
- b. Any monitor downtimes of more than eight hours in any calendar day shall be promptly reported to the Paducah Regional Office of the Division for Air Quality by phone, facsimile transmission, or electronic mail within one business day.
- c. A summary of the precipitator and scrubber inspection logs shall be included in the semi-annual report submitted to the Division for Air Quality.

Please refer to additional requirements in Section F.

7. Specific Control Equipment Operating Conditions: Permittee shall operate the precipitator and wet scrubber in accordance with manufacturer's recommended operating practices. Please refer to Section E.

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SECTION I - COMPLIANCE SCHEDULE

Not Applicable.